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APPLICATION NO.	FII	LING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/085,972	02/28/2002		Karoline Bechtold-Peters	1/1197	1212
28501	7590	06/30/2004		EXAM	INER
BOEHRING 900 RIDGEBI		ELHEIM CORI	KISHORE, GOLLAMUDI S		
P. O. BOX 36		ΑD	ART UNIT	PAPER NUMBER	
RIDGEFIELD	), CT 0	6877		1615	

DATE MAILED: 06/30/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

	Application No.	Applicant(s)					
	10/085,972	BECHTOLD-PETERS ET AL.					
Office Action Summary	Examiner	Art Unit					
	Gollamudi S Kishore, PhD	1615					
The MAILING DATE of this communication app Period for Reply	ears on the cover sheet with the c	orrespondence address					
A SHORTENED STATUTORY PERIOD FOR REPLY THE MAILING DATE OF THIS COMMUNICATION.  - Extensions of time may be available under the provisions of 37 CFR 1.13 after SIX (6) MONTHS from the mailing date of this communication.  - If the period for reply specified above is less than thirty (30) days, a reply If NO period for reply is specified above, the maximum statutory period who is a reply within the set or extended period for reply will, by statute, Any reply received by the Office later than three months after the mailing earned patent term adjustment. See 37 CFR 1.704(b).	66(a). In no event, however, may a reply be time within the statutory minimum of thirty (30) days fill apply and will expire SIX (6) MONTHS from cause the application to become ABANDONE	rely filed s will be considered timely. the mailing date of this communication. O (35 U.S.C. § 133).					
Status							
1) Responsive to communication(s) filed on	<b></b> •						
	action is non-final.						
· ·							
closed in accordance with the practice under E	x parte Quayle, 1935 C.D. 11, 45	i3 O.G. 213.					
Disposition of Claims							
4)⊠ Claim(s) <u>1-6</u> is/are pending in the application.							
4a) Of the above claim(s) is/are withdrawn from consideration.							
5) Claim(s) is/are allowed.							
6)⊠ Claim(s) <u>1-6</u> is/are rejected.							
7) Claim(s) is/are objected to.							
8) Claim(s) are subject to restriction and/or election requirement.							
Application Papers							
9) The specification is objected to by the Examine	r.						
10) The drawing(s) filed on is/are: a) accepted or b) objected to by the Examiner.							
Applicant may not request that any objection to the							
Replacement drawing sheet(s) including the correct							
11)☐ The oath or declaration is objected to by the Ex	aminer. Note the attached Office	Action or form PTO-152.					
Priority under 35 U.S.C. § 119							
12)⊠ Acknowledgment is made of a claim for foreign	priority under 35 U.S.C. § 119(a)	)-(d) or (f).					
a)⊠ All b)⊡ Some * c)⊡ None of: 1.⊠ Certified copies of the priority documents have been received.							
<ul> <li>1. Certified copies of the priority documents have been received.</li> <li>2. Certified copies of the priority documents have been received in Application No</li> </ul>							
3. Copies of the certified copies of the priority documents have been received in this National Stage							
•	application from the International Bureau (PCT Rule 17.2(a)).						
* See the attached detailed Office action for a list of the certified copies not received.							
Attachment(s)	A) Thinks in Summer	(PTO_413)					
1) Notice of References Cited (PTO-892)  4) Interview Summary (PTO-413)  Paper No(s)/Mail Date							
3) Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)	5) Notice of Informal F 6) Other:	atent Application (PTO-152)					
Paper No(s)/Mail Date <u>4-14-04</u> .	ار ال التقاد						

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## **DETAILED ACTION**

Claims included in the prosecution are 1-6.

## Claim Rejections - 35 USC § 102

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless -

- (b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.
- 2. Claims 1-3 are rejected under 35 U.S.C. 102(b) as being anticipated by Maitra (5,874,111).

Maitra discloses water-soluble drugs coated with poloxamer (note abstract,

Figure 1, col. 1, line 64-67; claim 7).

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

3. Claims 1-6 are rejected under 35 U.S.C. 102(e) as being anticipated by Weers et al (6,309,623).

Weers et al disclose particles of water-soluble drugs such as albuterol sulfate,

cromolyn sodium and gentamicin sulfate coated

with poloxamer or sorbitan esters such as sorbitan monooleate. The particles further contain solid sodium chloride and sodium phosphate. The aerodynamic diameter of the

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particles 1.23 microns (abstract, col. 17, lines 3-15; Examples III and IV on col. 32 and Example VIII on col. 35).

## Claim Rejections - 35 USC § 103

- 4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:
  - (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.
- 5. Claims 1-6 are rejected under 35 U.S.C. 103(a) as being unpatentable over Weers cited and for the reasons set forth above or Baichwal (5,738,865).

The teachings of Weers have been discussed above. Instant claims recite alcohol (sorbitan) esters as one of the

surfactants. What are lacking in Weers are examples showing the use of sorbitan esters. However, it would have been obvious to one of ordinary skill in the art to use sorbitan esters, with a reasonable expectation of success, since Weers provides adequate guidance for the preparation of the particles.

Baichwal while disclosing powder insufflation formulations containing proteinaceous drugs and polysaccharides teaches that inclusion of a surfactant such as sorbitan esters and poloxamer modifies the release-controlling properties of the drug particles. The particle diameter ranges from 100 nanometers to 10 microns (abstract, col. 6, line 66 through col. 7, line 35; col. 7, line 43 through col. 9, line 32; col. 10, lines 64-68 and claims). It would have been obvious to one of ordinary skill in the art to coat

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the drug particles with the surfactants if the desired goal is to control the release rates of the drug particles based on the teaching of Baichwal.

The reference of Pitt (5,354,934) is cited of interest.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Gollamudi S Kishore, PhD whose telephone number is (571) 272-0598. The examiner can normally be reached on 6:30 AM- 4 PM, alternate Friday off.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Thurman K Page can be reached on (571) 272-0602. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Gollamudi S Kishore, PhD Primary Examiner

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